A PILOT STUDY TO EVALUATE THE THERAPEUTIC EFFICACY OF "THOTTAAR SINUNGI CHOORANAM" (INTERNAL MEDICINE) ON *MANA SORVU* (DEPRESSION)

Vikram Kumar V[1] Kaviarasi K[2] Muralidass S D[3] Guru Manekandan A[4] Mahadevan M V[5] Muthukumar N J[6] Ramaswamy R S[7]

1. Assistant Medical Officer (Siddha), Andiappanur, Vellore
2. Assistant Medical Officer (Siddha), Needamangalam, Thiruvarur
3. Medical Officer , Siddha Central Research Institute, Chennai
4. Medical Officer, Medisiddh Pharma Private Limited, Kovilpatti
5. Lecturer, Dept of Sirappu Maruthuvam, National Institute of Siddha, Chennai
6. Associate Professor, Dept of Sirappu Maruthuvam, National Institute of Siddha, Chennai
7. Director General, Central Council for Research in Siddha, Chennai

ABSTRACT:

Siddha system of Medicine has mentioned about symptoms of many Psychiatric Diseases. The symptoms of Depression such as lack of interest in all activities, fatigue, depressed mood, insomnia etc., are mentioned in Siddha texts under Mana noigal. A depressive disorder is a syndrome (group of symptoms) that reflects a sad and/or irritable mood exceeding normal sadness or grief. Hence the symptoms of Depression can be correlated to the symptoms mentioned in Mana Sorvu according to Siddha literature. Thottar Sinungi Chooranam was given to 9 (nine) Depressive patients for 48 days and a Pilot study was carried out. The results of the study show dramatic relief in the symptoms of Depression. (Depressed mood, lack of interest in activities, insomnia, anxiety etc).

KEY WORDS

Corresponding author: Dr.S.D.Muralidass,   *Email id: drmuralinis@gmail.com*

INTRODUCTION

The name Siddha medicine owes its origin to medicinal ideas and practices of a class of Tamil sages called the Siddhars- "perfected" or "holy immortals" that were, and are still, believed to have superhuman powers. They had firm faith in the "deathless" physical body being in tune with the spiritual immortal "soul". Significantly, one of the definitions of Siddha

medicine is conquest of death: "that which ensures preventive against mortality"[1]. The medicines in Siddha system of Medicine are prepared from Herbs, Minerals and of Animal origin. Apart from internal medicines Varmam, Thokkanam, Yogam are a part of Siddha system.

Siddha system of medicine has mentioned a lot about Mana noigal like Madha azivu, Madha noi, Kirigai, Unmadham. Siddhars also had mentioned about the treatment aspects for Mana noigal. The symptoms of Mana Sorvu include lack of interest in all activities, fatigue, depressed mood, insomnia etc[2].

A Depressive disorder can be correlated to the symptoms of Mana Sorvu stated in Siddha system of Medicine. A depressive disorder is a syndrome (group of symptoms) that reflects a sad and/or irritable mood exceeding normal sadness or grief. More specifically, the sadness of depression is characterized by a greater intensity and duration and by more severe symptoms and functional disabilities than is normal.

Depressive disorders are a huge public-health problem, due to its affecting millions of people. About 10% of adults, up to 8% of teens and 2% of preteen children experience some kind of depressive disorder[3].

This is the largest population-based study from India to report on prevalence of Depression and shows that among urban south Indians, the prevalence of depression was 15.1%. Age, female gender and lower socio-economic status are some of the factors associated with depression in this population. The overall prevalence of depression was 15.1% (age-adjusted, 15.9%) and was higher in females (females 16.3% vs. males 13.9%, p<0.0001). The odds ratio (OR) for depression in female subjects was 1.20 [Confidence Intervals (CI): 1.12–1.28, p<0.001] compared to male subjects. Depressed mood was the most common symptom (30.8%), followed by tiredness (30.0%) while more severe symptoms such as suicidal thoughts (12.4%) and speech and motor retardation (12.4%) were less common[4].

Every month, about 5 patients with Psychiatric disease report to OPD Of Ayothidoss Pandithar Hospital, National Institute of Siddha, Tambaram sanatorium, Chennai-47. In the Modern era, Depression is a major problem among people. We feel that Thottaar sinungi will reduce the symptoms of Depression and it is cost effective too.

In recent years the incidence of Depression is on the rise. The reason may be due to life style modification and increase in Stress levels in indivuals. The use of Anti – Depressive drugs in Allopathic system may induce few side effects. Hence the objective of this study is to find out

whether Thottar Sinungi Chooranam (Herbal drug) will reduce the symptoms of Depression so that it will prove beneficial to the community.

MATERIALS AND METHODS

Patients with Mana Sorvu (Depression) reporting at Ayothidoss Pandithar Hospital of National Institute of Siddha, Chennai, were recruited for participation in the trial. Approval of the Institutional Ethical Committee was obtained for the study.

Both Male and Female patients with age between 20 years and 55 having symptoms such as Depressed mood, Reduced level of Interest, Considerable loss or gain of weight, Insomnia or hypersomnia, Psychomotor agitation or retardation, fatigue, thoughts of extreme guilt, diminished ability to think or concentrate, Suicidal thoughts, Diabetes mellitus, Willing to participate in the trial and signing consent by fulfilling the conditions of proforma, Willing to give blood sample for analysis for laboratory investigations were included in the trial.

Patients with Hypertension, Cardiac diseases, Malignancy, Drug addicts, Patients with any other serious illness, Pregnancy, lactation, Patients taking anti depressant drugs were excluded from the trial.

CONDUCT OF THE STUDY

The trial drug Thottaar Sinungi Chooranam was given internally 2 gm b.i.d for 48 days. Purgation with Agasthiyar kuzhambu – 200 mg early morning with Palm jaggery was given for balancing the deranged Mukkutram a day before treatment. The clinical assessment was recorded in the appropriate forms. The trial drugs were given in the Out-patient Department of NIS. The out-patients were asked to follow regular check up in the OP Department once in 7 days. In each visit, the clinical assessment was recorded. The laboratory investigations were done before and after treatment and were recorded in the prescribed format. At the end of the treatment the patients were advised to have follow up visits in the OPD for 2 more months. If any trial patient failed to collect the trial drug on the prescribed day, but wanted to continue in the trial from next day or two he/she were allowed. Defaulters for one week were not allowed to continue and were withdrawn from the study with fresh case being inducted.

Routine blood investigations, urine examination, biochemical investigations such as Fasting and Post prandial Blood sugar, Lipid profile were done in all the patients before and after treatment at Bio-chemistry and Clinical Pathology laboratory at National Institute of Siddha. All data in respect of Patient History and Clinical Research Form were filled by the investigator.

Assessment of Gradation in Depression for each patient was made by the investigators at start and end of the treatment by using Hamilton Depression Rating Scale.

GRADATION OF DEPRESSION:

HAMILTON DEPRESSION RATING SCALE (HAM-D)

The Hamilton Depression Rating Scale (HAM-D) has proven useful for many years as a way of determining a patient's level of depression before, during, and after treatment. It should be administered by a clinician experienced in working with psychiatric patients.

Although the HAM-D form lists 21 items, the scoring is based on the first 17. It generally takes 15-20 minutes to complete the interview and score the results. Eight items are scored on a 5-point scale, ranging from 0 = not present to 4 = severe. Nine are scored from 0-2. Since its development in 1960 by Dr. Max.Hamilton of the University of Leeds, England, the scale has been widely used in clinical practice and become a standard in pharmaceutical trials.

HAM-D Scoring Instructions:

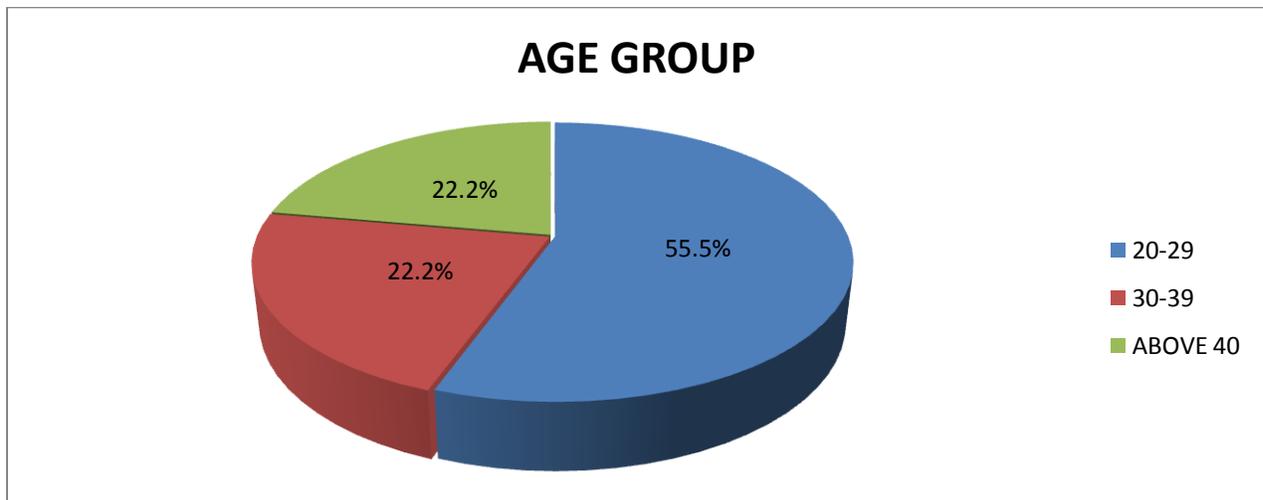## Sum the scores from the first 17 items.

0-7 = Normal

8-13 = Mild Depression

14-18 = Moderate Depression

19-22 = Severe Depression

≥ 23 = Very Severe Depression[5]

OBSERVATIONS AND DISCUSSION:

AGE GROUP

- 22.2%
- 22.2%
- 55.5%
- 20-29
- 30-39
- ABOVE 40

Regarding age group, 55.5% of the cases were in between 20 and 29, 22.2% of the cases were in between 30 and 39 whereas 22.2% of the cases were above the age of 40. This attributes

to the fact that Mana Sorvu (Depression) is also more common in adults due to Life style modification.

RESULTS
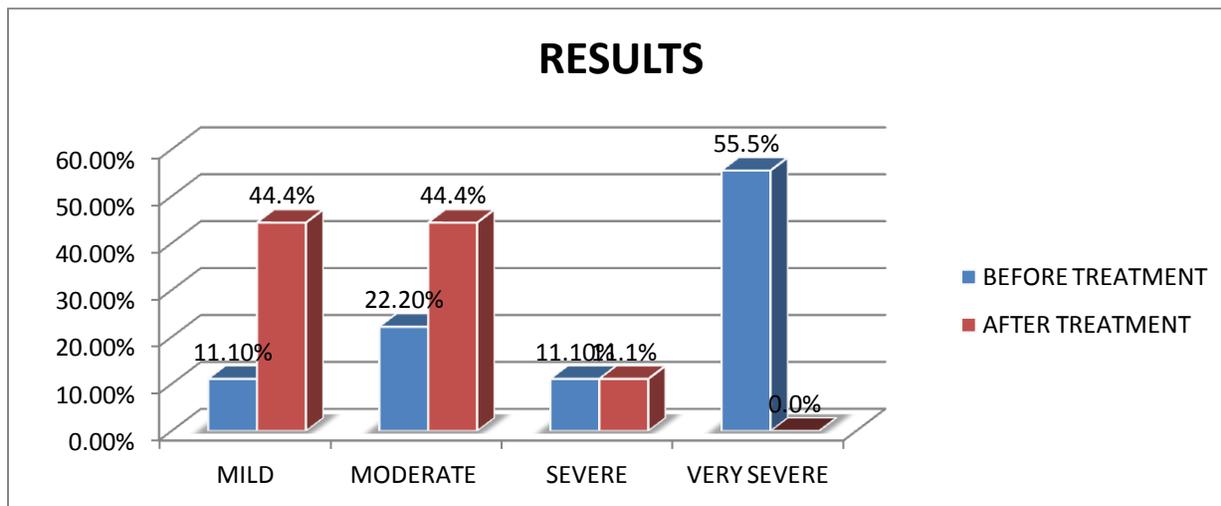
Before treatment, Out of 9 Patients, 55.5% of the patients were in very severely depressed state but after treatment very severely depressed state reduced to 0.0%. 22.2% were in moderately depressed state before treatment but after treatment 44.4% of the patients were in a moderately depressed state. 11.1% of the cases were in severely depressed state before and after treatment and 11.1% of the patients were in a mildly depressed state before treatment but after treatment 44.4% of the patients were in a mildly depressed state.

In all the 9 patients symptoms of Depression got reduced but didn't clear off completely, Insomnia get reduced in 88.8% of the cases.
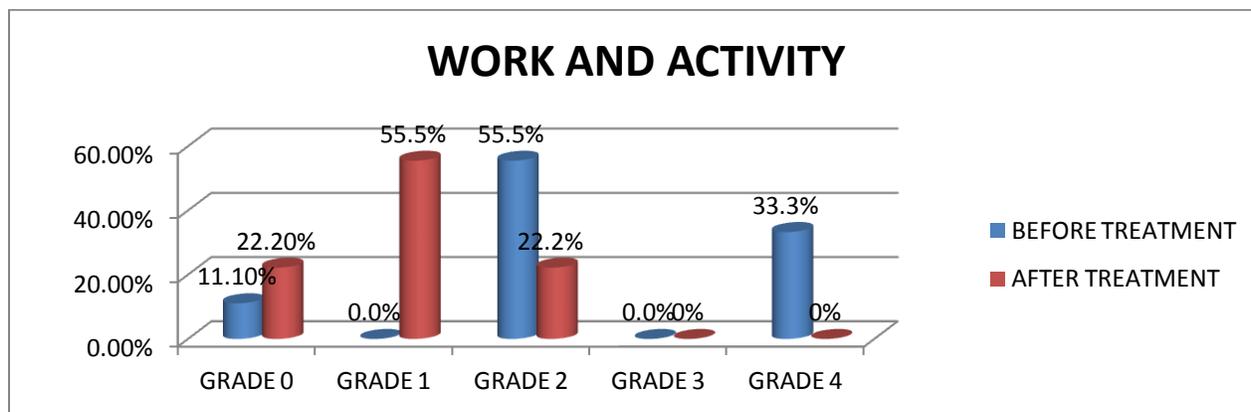
WORK AND ACTIVITY

Regarding Work and activity, 33.3% of the cases were in Grade 4 before treatment but after treatment no cases were in Grade 4. No patients were in Grade 3 before and after treatment. Before treatment 55.5% of the cases were in Grade 2 but after treatment it got reduced to 22.2%. Before treatment no cases were reported in Grade 1, after treatment 55.5% of the cases were in

Grade 1. 11.1% of the cases were in Grade 0 before treatment and 22.2% of the cases were in Grade 0 after treatment.

The symptoms of Depression got reduced in all the patients after the treatment which was assessed by using Hamilton Depression Rating Scale. Almost all the patients developed interest in their daily activities which was not appreciable at the start of the treatment.

STASTICAL ANALYSIS:

All collected data were entered into MS Excel software using different columns as variables and rows as patients. SPSS software was used to perform statistical analysis. Basic descriptive statistics include frequency distributions and cross- tabulations were performed. The quantity variables were expressed as Mean Standard deviation and qualitative data as percentage. A probability value of < 0.05 was considered to indicate as statistical significance. Paired 'T' test was performed for determining the significance between and after treatment.

RESULTS:

The mean for Qn 3 before treatment was 2.67 which were the highest for all the 17 Questions. Qn 3 is related to Suicidal tendency which proves that almost all the patients had the suicidal tendency due to depression. The mean for Qn 2 before treatment was 2.33 which was the second highest for all the 17 Questions. Qn 2 is related to Guilty feeling. Most of the patients had guilty feeling in their Minds suffering from Depression. The mean for Qn 7 before treatment was 2.22 which was the Third highest for all the 17 Questions which is related to work and Activities of a person. This proves that as a result of Depression the normal work and activities of a person gets affected. The mean for Qn 11 before treatment was 2.11 which was the Fourth highest for all the 17 Questions which is related to Anxiety (Somatic) symptoms. This proves that many patients had the effects of Autonomic over activity.

After treatment the reduction in the Mean was highest for Qn 5 which was 73.33 which is related to Insomnia middle. This proves that patients had improvement in symptoms of Insomnia (Middle). After treatment the reduction in the Mean was second highest for Qn 3 which was 70.83 which is related to Suicidal tendency. After treatment most of the patients had reduced thoughts of Suicide. After treatment the reduction in the Mean was third highest for Qn 2 which was 61.90 which is related to guilty feeling. After treatment many patients had reduced feeling of Guilt. After treatment the reduction in the Mean was fourth highest for Qn 6 which was 60.00 which is related to Insomnia late. This is an evidence for reduction in symptoms of Insomnia late. The results show that patients had reduction in the symptoms of both Insomnia middle, late,

Which proves that Thottar Sinungi Chooranam is an excellent drug for Insomnia. The Mean for Qn 14, Qn 15, Qn 16, Qn 17 before and after treatment is same which is 0.33 and there is no reduction in Mean for those Questions.

There was difficulty in assessing Questions like Qn 11 which is Anxiety (Somatic) since it had many symptoms. Few Questions had to be assessed based on the answers of the Attendar of the patient.

CONCLUSION:

The above study reveals that Thottar Sinungi Chooranam is very useful in reducing the symptoms of Mana Sorvu (Depression). The symptoms of Depression got reduced in all the patients which was assessed by using Hamilton Depression Rating Scale. Most of the patients developed interest in their activities which is a great sign in Depressive patients. This study proves that it improves the working capacity of the patients. There was also improvement in the symptoms of Insomnia which shows that Thottar Sinungi Chooranam is a very good drug to treat Insomnia. Suicidal tendency also got reduced in most of the patients. Since it is a herbal preparation it didn't cause any adverse effects during the trial and the drug is easily available. Hence this drug will be a gain for the community. Extensive study on this drug with more number of patients in future will prove more beneficial to the society.

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